

A1

2. (Amended) A hydrogel according to claim 1 having an elasticity modulus less than about 10 kPa.

A2

7. (Amended) A hydrogel according to claim 1, wherein the hydrophilic polymers have a molecular weight of at least 200,000.

8. (Amended) A hydrogel according to claim 1 having a polymer content of about 30 to 80% (wt).

A3

12. (Amended) A hydrogel according to claim 1 wherein the hydrophilic polymer is at least one selected from the group consisting of $-(CH_2-CHOH)_n-$ (polyvinyl alcohol); $-(CH_2-CH_2)_n(CH_2-CHOH)_m-$ (copolymer of ethylene and vinyl alcohol); $-(CH_2-CH_2-CHOH)_n-$ (poly(1-hydroxy-1,3-propanediyl)); and $-(CH_2-CH(CH_2OH))_n-$ (polyallyl alcohol).

A4

15. (Amended) A hydrogel according to claim 14, wherein the crosslinking density is less than about 10%.

16. (Amended) A hydrogel according to claim 15 crosslinked by a diisocyanate.

19. (Amended) A hydrogel according to claim 19, wherein R is an optionally substituted lower alkyl group having one to ten carbon atoms.

A5

20. (Amended) A hydrogel according to claim 19, wherein R is $-(CH_2)_4-$.

21. (Amended) A hydrogel according to claim 14 crosslinked by an epoxy compound.

AS

22. (Amended) A hydrogel according to claim 12, wherein the hydrophilic polymer is poly(1-hydroxy-1,3-propanediyl).

23. (Amended) A hydrogel according to claim 22 crosslinked with diisocyanate.

AC

26. (Amended) A hydrogel according to claim 24, wherein the hydroxyl groups of poly(1-hydroxy-1,3-propanediyl) are modified with a monoisocyanate before being crosslinked with a lower alkyl diisocyanate.

27. (Amended) An implant made of a hydrogel according to claim 1.

28. (Amended) An ophthalmic lens made of a hydrogel according to claim 1.

29. (Amended) An ophthalmic lens according to claim 27 having

- (a) an elasticity modulus less than about 10kPa;
- (b) a tensile strength of at least about 1 MPa;
- (c) an elongation of at least 50% at equilibrium water content;
- (d) sufficient optical clarity so as to obtain an optical transmission of at least about 40%; and
- (e) a refractive index of at least about 1.40.

30. (Amended) A method of preparing a hydrogel having a low elasticity modulus from a hydrophilic polymer comprising the steps of:

- Alc
- (a) selecting hydrophilic polymer of sufficiently high molecular weight;
 - (b) dissolving said polymer in a solvent to a concentration not exceeding about 5% (wt);
 - (c) adding a crosslinking agent;
 - (d) mixing and reacting the polymer with the crosslinking agent; and
 - (e) evaporating said solvent; and
 - (f) optionally adding water.
-

32. (Amended) A method according to claim 30, wherein the hydrophilic polymer has a molecular weight of at least about 200,000.

33. (Amended) A method according to claim 30 further comprising degassing the solution of polymer in solvent.

35. (Amended) A method according to claim 30, wherein the hydrophilic polymer has hydroxyl group-carrying carbon-carbon backbone.

36. (Amended) A method according to claim 35, wherein the hydrophilic polymer is at least one polymer selected from the group consisting of $-(CH_2-CHOH)_n-$ (polyvinyl alcohol); $-(CH_2-CH_2)_n(CH_2-CHOH)_m-$ (copolymer of ethylene and vinyl alcohol); $-(CH_2-CH_2-CHOH)_n-$ (poly(1-hydroxy-1,3-propanediyl)); and $-(CH_2-CH(CH_2OH))_n-$ (polyallyl alcohol).

37. (Amended) A method according to claim 35 further comprising modifying the hydrophilic polymer by reacting it with a mono-isocyanate.

38. (Amended) A method according to claim 37 comprising modifying less than 15% of the hydroxyl groups.

A8 39. (Amended) A method according to claim 30 comprising performing the crosslinking at constant volume.

40. (Amended) A method according to claim 30 resulting in the formation of a hydrogel having an elasticity modulus less than about 10 kPa.

41. (Amended) A method according to claim 36 wherein the hydrophilic polymer is (poly(1-hydroxy-1,3-propanediyl)).

42. (Amended) A method according to claim 41 wherein the crosslinking agent is a diisocyanate.
